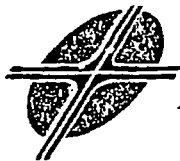


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ASH GROVE CEMENT WEST, INC.

Inter-Office Memorandum

Date November 17, 1989

To Steve Sheridan

From Ken Rone

Copies to Dick Cooke

Subject Pond Relocation

I have tried to put some thoughts together on how best to relocate the settling pond if indeed it needs to be relocated. It presently enjoys the most optimum location except for the fact that it occupies open space near the waterfront that could otherwise be used for material stockpiling. I would investigate capping the present pond and impart structural strength to the cap by driving pilings within the pond. The pilings would not negatively impact the performance of the pond and would provide tremendous load bearing capability to the cap which could then become a working surface.

If it must be moved I have shown five alternative locations. Location #1 would provide the most picturesque layout. Along with location #2, it presumes abandonment of the present office building and incorporates the cost of demolition. Location #2 utilizes the walls of the present office basement to contain the pond. You may recall that you walk uphill to get to the entrance of the office. This elevation increase provides an excellent hydraulic head to help drive the water down into the water table. Keep in mind that the water table in this area is much higher than at the pond's present location. Thus, some kind of compensation must be provided. In these cases the enlarged size of location #1 (larger than the present pond despite less flow over original expectations) and the artificial hydraulic head at location #2 should overcome the reduced tendency to percolate that this area holds.

Location #3 is much nearer the river and should not experience the water table problems the previous locations had. It does require demolition of the balance of the raw mill building and is the most expensive option. I am not sure if its higher elevation than the crusher area would create a horizontal component to the flow, thereby flooding it. I feel that the walls will have to be ten feet deep and impermeable to eliminate this risk.

Location 4 is right along the pipeline connecting Stoneways discharge and our truck wash to our pond. It is the smallest option but keep in mind that our flows are much smaller than originally permitted and that, if we rout our storm water runoff to Metro (which we are paying to do now whether or not we use it) we really have very little runoff; just truck wash and Stoneway!

USEPA SF



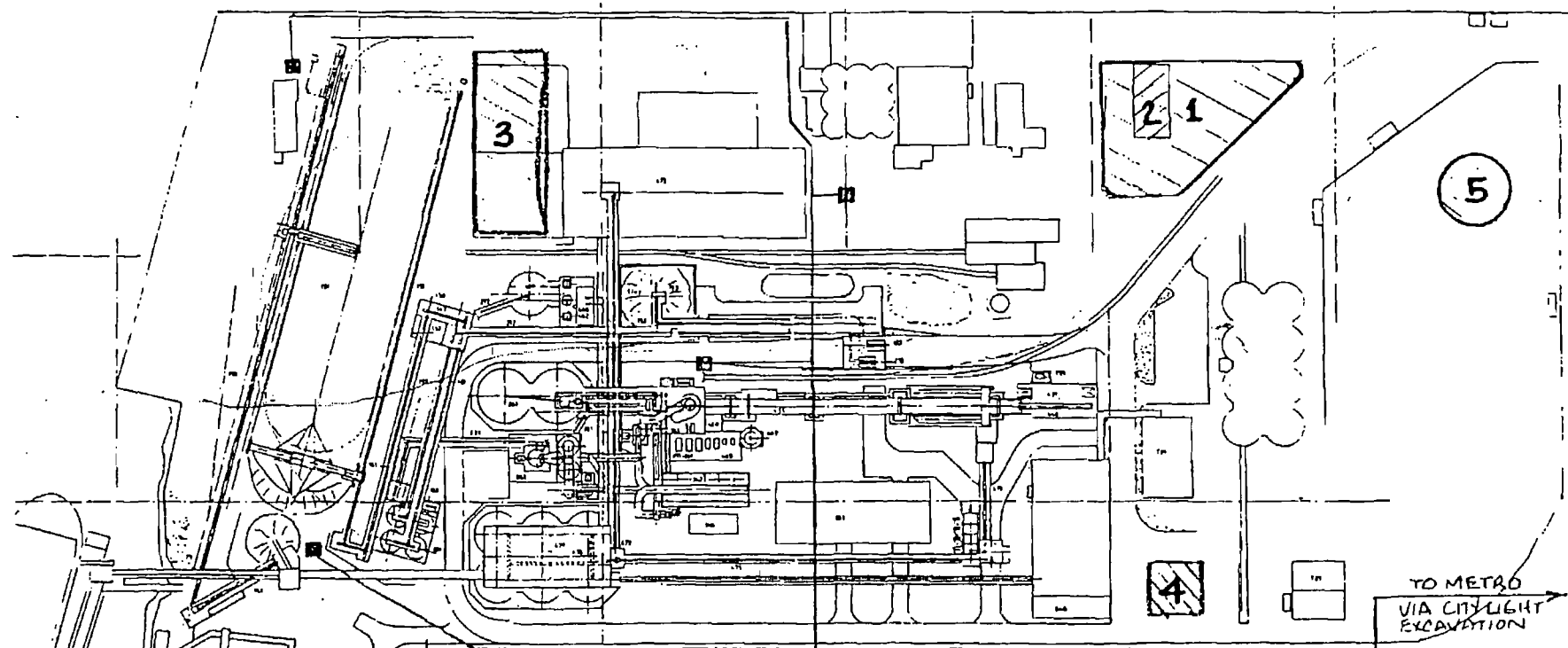
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Location 5 is the only unpaved area on the Stoneway lot. It is presently used for parking. If they would permit this site for a small pond it would at least help to reduce the flow to us and allow us to get by with an even smaller pond area.

Finally, getting back to the ponds original location, it would be interesting to determine how small we could make the existing pond considering some of the volume reducing modifications mentioned above. reducing its size by 75% would reclaim valuable land as well as making the capping design easier to come up with.

I will look foreword to your comments as this aspect of our project develops.



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|--|---|---|
| 11. <u>Site Selection</u> | 161. <u>Limnology Program</u> | 166. <u>Low Cost Bldg and Food</u> |
| 12. <u>Personnel</u> | 169. <u>Limnology/Clay Program to Find</u> | 167. <u>Local Mills, Bunkers, & Workshops</u> |
| 13. <u>Logistics</u> | 172. <u>Inter-For Day Food and Transport. in Bldg</u> | 168. <u>Planning/Construction</u> |
| 14. <u>Water Distribution</u> | 173. <u>For Mt. Bldg and Mill Food</u> | 169. <u>Water Distribution</u> |
| 15. <u>Gas Distribution</u> | 174. <u>Non Mill Requirements</u> | 170. <u>Climate Program to Build</u> |
| 16. <u>Power Distribution</u> | 175. <u>For Mill, Bldg and Mill, Dept.</u> | 171. <u>Climate Program to Develop</u> |
| 17. <u>Security Storage System</u> | 180. <u>Substation For Non Bldg and</u> | 172. <u>Climate Storage</u> |
| 18. <u>Security Heat Storage System</u> | 181. <u>Non Heat Program</u> | 180. <u>Substation</u> |
| 19. <u>Transportation from Bldg. to Food</u> | 182. <u>CP-Bldg and Bldg Food</u> | 181. <u>Substation</u> |
| 19a. <u>Lowest Bldg Storage</u> | 183. <u>Climate Program</u> | 182. <u>Substation</u> |
| 19b. <u>Inter-For Day and Bldg. Food</u> | 184. <u>Substation from Program</u> | 183. <u>Climate Program</u> |
| 19c. <u>Clay Storage</u> | 185. <u>Clay Storage and Bldg Food Storage</u> | 184. <u>Climate Program</u> |
| 19d. <u>Inter-For Day Food. to Bldg</u> | 186. <u>Substation</u> | 185. <u>Climate Program</u> |
| 19e. <u>Substation</u> | 187. <u>Inter-For Day</u> | 186. <u>Inter-For Day</u> |

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